Self Cleaning Filter

Self cleaning filter is used for preliminary filtration of demanding applications of various industries. They are very useful for applications where suspended solid load is comparatively high. They are also useful for filtration of highly viscous material and clarity based filtration applications. Their working principle is based on the differential pressure parameter across the filter. Discs can set a clean pressure drop and a change of clean pressure drop to a clogged pressure. They are available in these following:

- Gear/Back Pressure Type Filter
- Scrape Action Filter
- Disc Stripper

Back Wash Type

Construction

Back wash type self cleaning filter is constructed of filter housings, filter elements, drain valve, auto back wash valve and PLC controller. Filter housings can be offered in various materials of construction such as various grades of stainless steel, carbon steel and alloyed metal. Filter elements can be offered with sintered wire, straight barrel wire mesh, wedge wire mesh and sintered powder. They are selected on the requirement of filtration efficiency. For 104 micron elements, mercury is not allowed to use as sanitizing element. From 2 microns to 1000 microns, it is advisable to use straight barrel wire mesh and mesh wire mesh, depending upon the application requirement. For mesh filtration of 2 micron to 30 micron, straight barrel wire is suitable for back wash. Customers can use pneumatically or electrically operated butterfly valve in ball valve or plug valve as per their requirement. Normally, our systems are equipped with pneumatically operated solenoid valves for back washing and cleaning. Control panels can be furnished with 3 W flameproof and 3 W depending upon the process requirement.

Operation

Back wash type self cleaning filter works on flow direction of inside to outside. Unfiltered fluid enters into filter housing through bottom tangential inlet connection. Contaminates are deposited on the surface of filter elements and clean filtrate passes through inside diameter of element and removed through the top tangential outlet. Users can set their differential pressure data with control panel. Once the differential pressure crosses the system maximum the pre-defined level of pressure drop, inlet and outlet valve shut down and the discs and actuated positions due to predefined internal time. During this period, debris deposits on surface of element shall shut down and collected through bottom drain. Discs cycle continues as per pre-defined settings and process requirements.

Features and Benefits

- High filtration accuracy, stable element quality and supply.
- Due to the test reach and emergency operation function, self cleaning filter can do automatic back washing and can cope with volatile fluctuations of water/medium.
- Filter equipment control system in unique and has a precise operation, which is to adjust back washing pressure setting according to different mass and density of filter elements.
- The gear motor runs against the spring actuated scraper and the particles or agglomerates are skimmed up and the impurities are emptied successfully, which makes the system clean.
- When the impurities at the bottom of the filter increases, the drain valve opens and the particles can be drained off the impurities from the filter with the help of the scraper mechanism.
- PLC control function means differential-pressure cleaning, scheduling of cleaning process and manual cleaning.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- Reduces the labor demands and no more filter screen changeouts.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- Reduces the labor demands and no more filter screen changeouts.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.
- Disc type clean permanent cartridge.
- Provides the filter media with a gentle back washing.
- Disc type clean permanent cartridge.
- No consumable material, low operation and maintenance cost, simple operation and maintenance.
- No replacement costs for filter screen and no disposal expenses.